INDIANA
Epidemiology
NEWSLETTER

Indiana State Department of Health

Epidemiology Resource Center
2 North Meridian Street, 3-D
Indianapolis, IN 46204
317/233-7416

December 2003
Vol. XI, No. 12

Viral Hepatitis in Indiana

Cheryl Pearcy
Hepatitis C Coordinator
Indiana State Department of Health

Brittany Mathers
Graduate Assistant
Ball State University

Hepatitis A

Hepatitis A is a viral infection transmitted most commonly by food or water contaminated with fecal material. Hepatitis A virus (HAV) can also be transmitted from person to person via fecal-oral contact. Hepatitis A is found primarily in humans.

An increase in vaccination against hepatitis A in travelers and children in high-risk communities has contributed to a decrease in the incidence of reported cases. Between 2001 and 2002, the number of reported acute clinical cases of hepatitis A in the United States dropped from 13,397 to 10,616. Hepatitis A vaccines used in the United States are safe, effective, and highly immunogenic. At least 97% of people have protective levels of antibody within one month of receiving the first dose of the vaccine and 100% have protective levels after the second dose. Vaccination is recommended for:

- people 2 years of age and older traveling to countries with high rates of hepatitis A,
- persons who live in communities that have prolonged outbreaks of hepatitis A or high rates of hepatitis A,
- men who have sex with men,
- persons who use street drugs,
- persons with chronic liver disease, and
- persons who receive clotting factor concentrates.

Table of Contents:

Article	Page No.
Viral Hepatitis in Indiana	1
Hepatitis C Testing of Offenders in the Indiana Department of Correction	6
Indiana Data of Influenza-Like-Illness (ILI) Sentinel Report	11
SARS Specimen Testing	16
Wonderful Wide Web Sites	17
HIV Disease Summary	17
Reported Cases of selected notifiable diseases	18

The recent outbreak of HAV infection associated with a Chi Chi's restaurant in western Pennsylvania underscores the importance of at-risk persons being vaccinated against this preventable disease. More than 500 cases have been reported resulting in 3 deaths.

Indiana does not have a high incidence state of hepatitis A, with generally fewer than 10 cases per 100,000 population each year. From 1998 to 2002, the numbers of reported cases for hepatitis A in Indiana were 156, 105, 132, 100 (provisional), and 50 (provisional) respectively. However, the number of cases for the first three quarters of 2003 already exceeds the 2002 reports. The most common at-risk groups reported in Indiana include contacts of confirmed cases, travelers to countries where hepatitis A is endemic, and men who have sex with men.

Increased hepatitis A vaccination is needed among high-risk demographic groups such as men who have sex with men and users of illegal drugs.

Hepatitis B

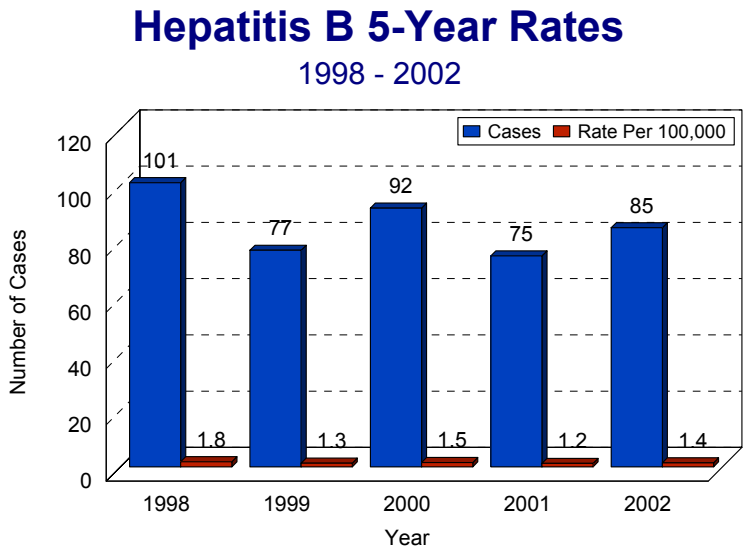
Hepatitis B virus (HBV) is a blood borne pathogen. Transmission occurs from direct contact with blood or body fluids that contain the virus. Each year there are approximately 600,000 HBV-related deaths worldwide, most of which are the result of chronic infection. In 1992 the World Health Organization (WHO) set a goal for all countries to integrate hepatitis B vaccination into routine childhood immunization. By May 2003, 151 of 192 WHO member states had achieved this goal. The primary objective of the hepatitis B vaccine is to prevent chronic HBV infection, which in turn will decrease the number of persons who are able to transmit the virus. The secondary objective is to prevent acute hepatitis B. The three dose vaccination process is 90-95% effective in achieving these objectives.

For the past three years the incidence of hepatitis B in the United States has been between 2.5-2.8 cases per 100,000 population annually. The number of acute clinical cases reported for 2000 and 2001 dropped from 8,036 to 7,844. Indiana is one of 47 states that include hepatitis B vaccination as part of the childhood vaccine series for school entry. Indiana law also requires reporting of acute hepatitis B infection in pregnant women and perinatally exposed infants. The highest rate of HBV infection in Indiana is found in adults between the ages of 50-59 followed by adults between the ages of 40-49. No cases under the age of 18 were reported in Indiana for 2002.

Three counties reported having more than five cases in 2002: Marion County, Lake County, and Vanderburgh County.

Figure 1 shows the 5-year trend for HBV infection in Indiana.

Figure 1.



Hepatitis C

Hepatitis C virus (HCV) is the most common chronic blood borne infection in the United States and the leading cause of liver transplants. Transmission of the virus occurs by direct blood-to-blood contact. A national survey (the third National Health and Nutrition Examination Survey [NHANES III]) of the civilian, non-institutionalized U.S. population found that 1.8% of Americans (3.9 million) have been infected with HCV, of whom 2.7 million are chronically infected. This survey did not include institutionalized individuals, including prison inmates, or individuals in disaffected living conditions, such as the homeless; therefore, this estimate is probably conservative.

The leading risk factor for acquiring HCV is injection drug use (IDU), which accounts for 60 % of HCV infections. Blood transfusion recipients (acquired prior to the implementation of blood supply screening in 1992) account for 10% of the infections. Sexual transmission accounts for 15% of infections, although transmission is highest among individuals who have 50 or more lifetime partners. Transmission among monogamous couples is extremely low. Five percent is attributed to hemodialysis, health care workers, and mother to child transmission. The remaining 10% has unknown or not identifiable causes.

Since screening of the blood supply for HCV began in 1992, the rate of HCV transmission has dropped dramatically. In 2001 it was estimated that 25,000 new cases of HCV would occur in the United States. That is down from 41,000 new cases estimated in 1998. Indiana received 6,314 new reports of positive HCV tests in 2002 and 5,312 reports were received in 2001. However, the mandatory reporting law for laboratories to report positive HCV tests to the Indiana State Department of Health did not go into affect until October of 2002, therefore, it is too soon to determine any type of trend for this disease.

Hepatitis C surveillance in Indiana is conducted through mandatory laboratory reporting. Because these reports come from laboratories and not from physicians, demographic information such as the patient's race or county of residence is frequently lacking. Also lacking from this type of reporting is risk factor (how the disease is acquired) information. The omission of this type of data impedes the best direction of resources to curtail the spread of infection. Therefore, Indiana, like the other 49 states, relies on CDC recommendations for conducting its hepatitis C intervention activities.

The focus of prevention and education activities in Indiana is multi-faceted. The burgeoning cost of HCV infection to Indiana's health care system requires the integration of HCV services into existing public health care settings such as HIV/STD programs, neighborhood health centers, and local health departments.

To help lower HCV disease incidence it is necessary to collaborate with other established partners including HIV, STD, Immunization, Department of Corrections (DOC), and Department of Mental Health. Indiana is a leader among states in beginning the HCV services integration process on a statewide basis and putting it in place at the local level.

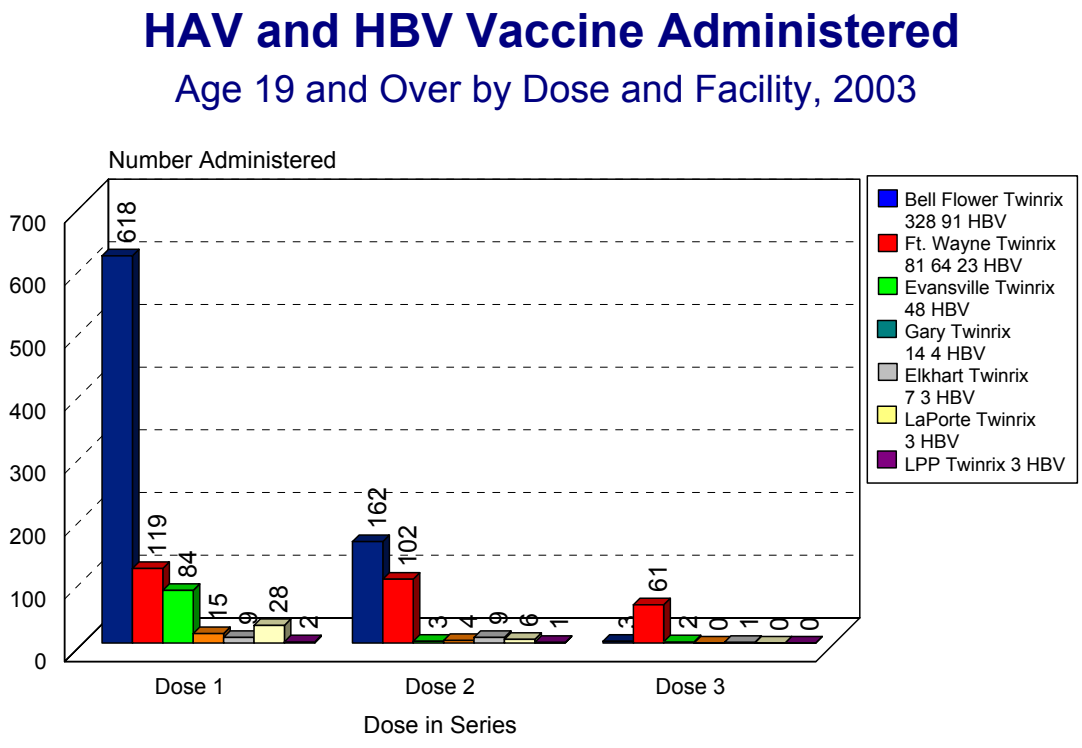
Indiana is proceeding with this integration in the following ways:

1. Guidelines for the local health departments regarding the reporting of HCV infections have been established.
2. HCV training programs for local health department nurses, disease intervention specialists (counselors for clients serviced at STD and HIV clinics), and HIV case workers are being conducted around the state as needed. These programs focus on the clinical course of infection, interpretation of test results, community resources for treatment referrals, and the integration of patient education and counseling techniques.
3. Protocols for testing at-risk clients in HIV and STD clinic settings have been developed.

4. Combination HAV and HBV vaccine (Twinrix, Glaxo Smith-Kline) for at-risk clients serviced in STD clinics is being furnished. Sites offering this service include:
    a. Allen County Health Department, Ft. Wayne
    b. Bartholomew County Health Department, Columbus
    c. Bell Flower Clinic, Indianapolis
    d. Boone County Health Department, Lebanon
    e. Community Health Services, Bloomington
    f. East Chicago Health Department, East Chicago
    g. Elkhart County Health Department, Elkhart
    h. Gary City Health Department
    i. LaPorte County Health Department, LaPorte and Michigan City
    j. Lafayette Planned Parenthood
    k. St. Joseph County Health Department, South Bend
    l. Vanderburgh County Health Department, Evansville
    m. Vigo County Health Department, Terre Haute

Figure 2 shows the number of high-risk adults that have been vaccinated in Indiana since the introduction of the vaccine program.

Figure 2.



The Indiana State Department of Health (ISDH) is working closely with the American Liver Foundation's Indiana Chapter in developing education initiatives for the citizens of Indiana. This will be done through various formats including the Liver Updates. In January 2004 a Liver Update will be conducted in Indianapolis consisting of a one-day seminar targeting the local health department and neighborhood health center health care professionals. One objective of this seminar will be to use these health care professionals to educate persons that test positive for viral hepatitis, particularly hepatitis C, about the risks associated with the disease and the course of action they can pursue to minimize liver damage. If successful, these seminars will be held in three other metropolitan areas of the state. A second objective is to address the issue of medical management and treatment of HCV infection in the uninsured or under insured population. Economic recession has led more individuals to turn to state-assisted programs for their health care needs. It is the goal of the ISDH to educate public health care providers, such as those practicing in neighborhood health centers, on the proper treatment protocols for HCV and to enable them to take care of individuals needing this assistance.

Currently, hepatitis C is among the most poorly funded public health initiatives, and one of the greatest threats to the U.S. economic health care structure. For the first time Indiana has an opportunity to eliminate HAV and HBV disease through use of vaccine. While HBV vaccine is mandated for all children entering third grade, it will take a minimum of nine years to catch up those adolescents entering school before the mandate, and at least that long to reach the high-risk adult population. To insure that the HAV/HBV vaccination program continues to reach the high-risk adult population, the viral hepatitis prevention program will be seeking necessary funding through both public and private sources.

ISDH has requested funding from the Council of State and Territorial Epidemiologists to create a written hepatitis plan to address the issues surrounding viral hepatitis as it relates to Indiana. The formulation of this plan will allow the state to partner with stakeholders affected by this issue and begin the necessary process of developing an organized approach to curtailing the epidemic.

Anyone interested in participating in this project or in hosting a HCV educational training or one-day seminar in your area, please contact:

Cheryl Pearcy
Hepatitis C Coordinator
HIV/STD Division
Indiana Department of Health
2 N. Meridian Street, 6-C
Indianapolis, IN 46204
Telephone: (317) 233-8602
cpearcy@isdh.in.state.us

Hepatitis C Testing of Offenders in the Indiana Department of Correction

David Garner
ISDH HIV/STD Division

The incarcerated population presents health problems related to infectious disease, substance abuse and, frequently, a lifetime of being medically underserved. In particular, this is a population at very high risk for Hepatitis C virus (HCV) and Human Immunodeficiency Virus (HIV). Prisons and jails offer uniquely important opportunities for improving disease control in the community by providing health care and disease prevention programs to a large and concentrated population of individuals at high risk for disease.

The prison setting poses special problems related to the transmission of HCV. An infected syringe might be used by perhaps a hundred different offenders because no other needles are available. Violent sexual assaults by an infected offender can also spread the disease.

Mandatory HCV and HIV testing for offenders sentenced to Department of Correction (DOC) facilities began on July 1, 2002. The DOC obtains a blood sample from offenders to test for syphilis also; however, syphilis testing is not mandated by law. HIV and HCV testing are dictated by HEA 1207, which was passed in 2001 and vetoed. The veto was overridden in 2002, and mandated testing began for offenders sentenced to the DOC after June 30, 2002. The new statute did not apply to the nearly 21,000 offenders incarcerated in the DOC prior to July 1, 2002, nor did it apply to offenders sentenced to county jails or community correction programs.

To comply with the provisions of the new law, the DOC tests offenders upon arrival at the intake facility. Adult male intake takes place at the Reception-Diagnostic Center in Plainfield, and adult females are received at the Indiana Women's Prison Intake Unit in Indianapolis. Male juvenile offenders are tested at the North Central Juvenile Correctional Facility in Logansport, and female juvenile offenders are received at the Indianapolis Juvenile Correctional Facility.

From July 1, 2003, through September 30, 2003, the DOC administered 4,434 hepatitis C tests to offenders at the intake facilities around the state. Of these HCV tests, 673 yielded positive results, which is a rate of about 15%. This incidence of HCV in Indiana prisons compares to rates of over 30% in states like New York and California where intravenous drug use is more of a problem.

Figures 1 and 2 reflect intake at the DOC from July through September of 2003 by race and by gender. Figures 3 and 4 show the number of positive tests for HCV during the same period by the race and gender. Future changes in the way data are collected will facilitate the study of these statistics by enabling larger numbers of offenders to be examined.

Figure 1.

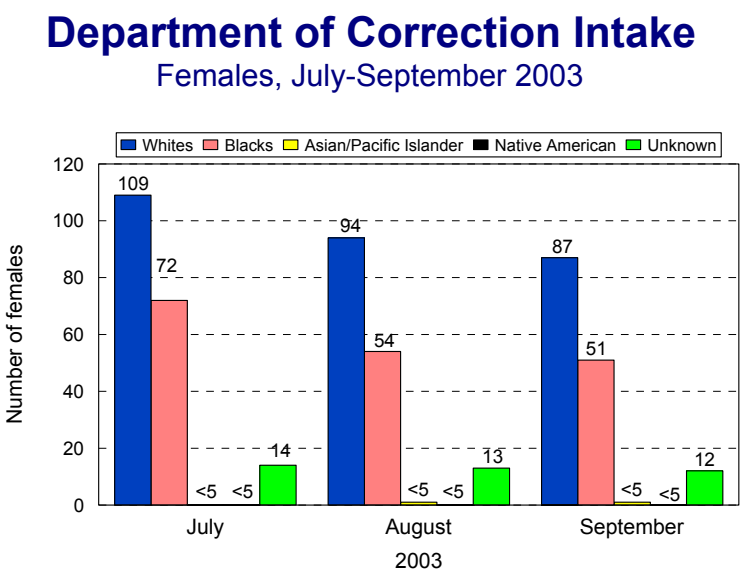


Figure 2.

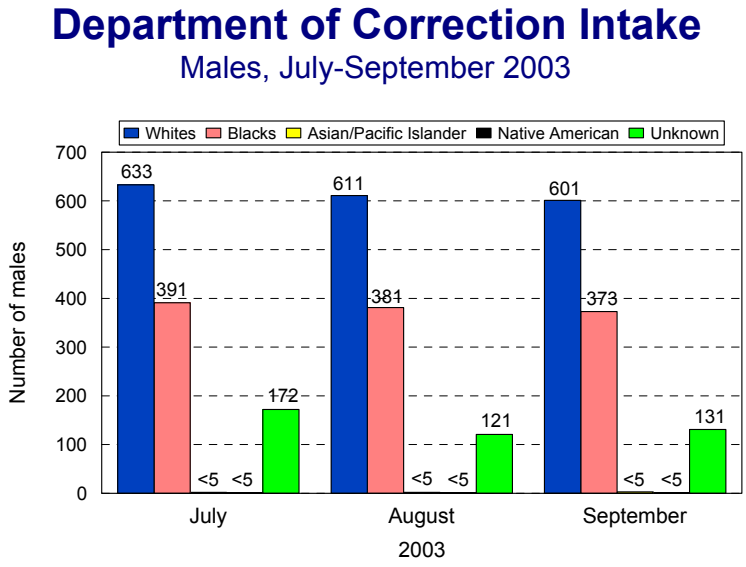


Figure 3.

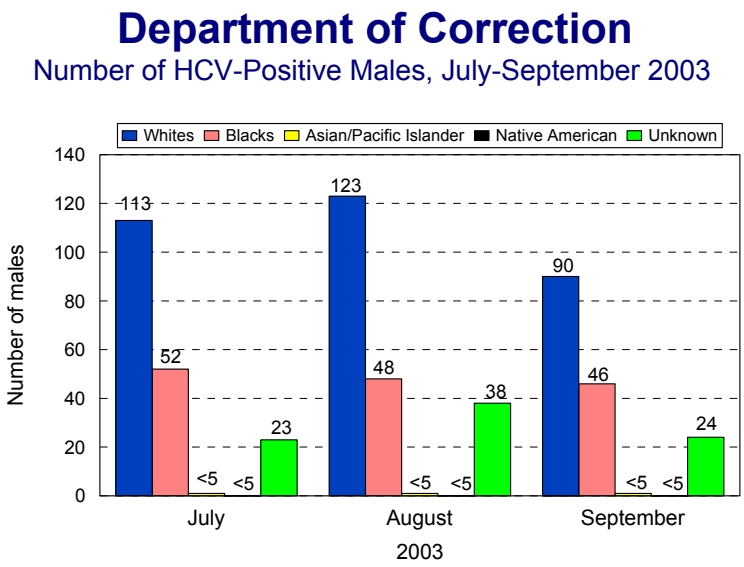
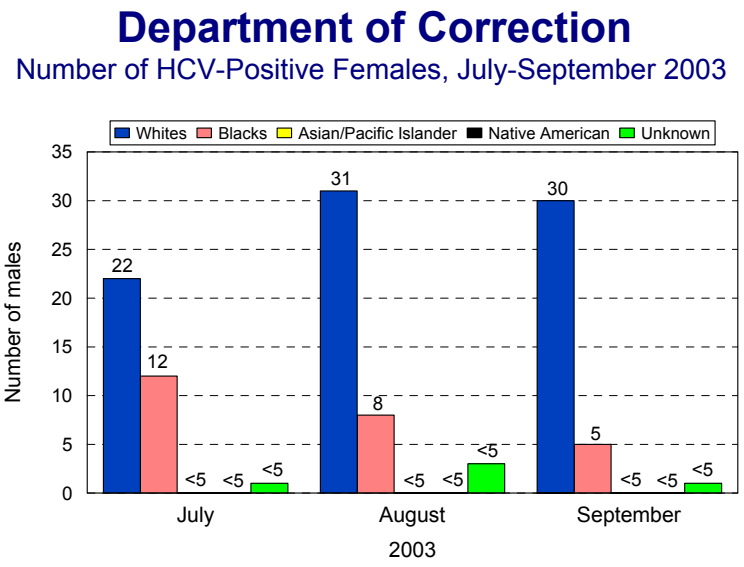


Figure 4.



Of particular interest in the HCV incidence of offenders during this three-month period is the higher rate for females. Their incidence is significantly higher than males, and this is probably explained by differential sentencing practices for women. A greater percentage of female sentences are related to serious drug offenses than the percentage of males incarcerated for these same kinds of drug crimes. Though many men are imprisoned for drug crimes, property offenses account for a higher percentage of their sentences when compared to women. Given the direct causal relationship between drug use and HCV infection, and the higher rate of women sentenced for drugs relative to men, the higher incidence of HCV infection is not surprising.

The presence of HCV infection requires a diagnostic evaluation that begins with a history and monitoring for the presence of liver inflammation, includes identification of alternative causes of liver inflammation, and examines related clinical conditions. HCV infection is not fully diagnosed until a test for the presence of HCV nucleic acid (RNA) is positive. This is not required unless liver biopsy or medication therapy is contemplated.

Alanine aminotransferase levels (ALTs) should be obtained every three months. If ALT elevation persists longer than six months, significant ongoing liver inflammation is present. ALTs that are consistently less than twice the upper limit of normal provide good evidence that significant inflammation is absent, and that the risk of cirrhosis or primary hepatocellular carcinoma is minimal or nonexistent.

Patients who are being considered for HCV treatment must be carefully counseled by a trained counselor. Treatment for HCV is a long process, generally lasting six months to a year, and requires careful monitoring. Uncomfortable side effects are routine for the entire period, and unmotivated patients are unlikely to complete the therapy.

Criteria for medication treatment include:

- ALTs are persistently greater than twice the upper limit of normal (not including any test obtained during the first three months of incarceration.) Alternate causes of ALT elevation inflammation have been ruled out and the ALT elevation is ascribed to the HCV infection.
- The patient has been diagnosed as infected with HCV and has had a positive serologic test. The patient has not had repeatedly negative qualitative assays for HCV nucleic acids.
- The patient is well informed regarding the disease and proposed therapy.
- The patient is willing and competent to sign informed consent for treatment.

Exclusion Criteria:

- clinical signs of liver failure or "decompensated" cirrhosis (any history of ascites, variceal bleeding, hypersplenism, hepatic encephalopathy, etc.);
- serious anemia of any cause (hemoglobin below 12 g% in men or below 11 g% in women);
- bone marrow compromise indicated by neutrophils below 1500 or platelets below 100,000;
- creatinine greater than the upper limit of normal unless clearance has been received from a nephrologist;
- serious cardiac disease unless clearance has been received from a cardiologist;
- serious cerebrovascular disease unless clearance has been received from a neurologist;
- severe pulmonary disease (COPD, asthma, etc.) unless clearance has been received from a pulmonary specialist;
- autoimmune disorder (systemic or organ specific) either by diagnosis or by positive anti-nuclear antibody, smooth muscle antibody, or anti-mitochondrial antibody unless clearance has been received from a rheumatologist;
- presence of retinopathy unless clearance has been received from an ophthalmologist;
- history of organ transplant;
- HIV disease with CD_4 below 350 or viral load other than undetectable;
- continuing or recent (previous six months) treatment of a serious mental disorder, especially including psychosis-producing disorders or depressive disorders, unless clearance has been received from a psychiatrist and the patient will be monitored during treatment;
- history of documented abuse of drugs or alcohol within the preceding 24 months, expectation that injection drug or alcohol use will resume upon release from incarceration, or failure successfully to complete substance abuse therapy;

- pregnancy or refusal to avoid pregnancy during and for at least six months after cessation of therapy whether the patient is male or female (two methods of birth control used simultaneously must be intended);
- history of non-adherence to medical therapy during the previous two years; and
- short life expectancy (less than 10 years).

If after review of inclusion and exclusion criteria the patient remains a candidate for medication therapy, the genotype of the infecting HCV should be determined. If the genotype is 1, 4, 5, or 6, referral for liver biopsy is indicated. These genotypes are relatively resistant to medication therapy and only those whose livers demonstrate ongoing significant inflammation and necrosis should be treated. If the genotype is 2 or 3, liver biopsy is not necessary. These genotypes are relatively sensitive to medication therapy and treatment can be initiated without first resorting to liver biopsy.

The most effective therapy available is currently a combination of pegylated interferon and ribavirin, with dosage adjusted for patient weight. The success of treatment is initially gauged by monitoring viral load. Viral load must be determined prior to medication initiation and again after three months of therapy. If the viral load has dropped at least two logs (or to undetectable levels), treatment should be continued for the full duration as planned according to genotype (24 weeks for types 2 and 3, 48 weeks for other types). If the viral load has not dropped at least two logs, treatment will not be successful and should be stopped. Patients in this category should be assured that, if newer and more effective treatments become available, they will be considered for them at that time.

Treatment for HCV is successful in 50% to 60% of patients. Studies have shown that five factors are good predictors of successful treatment:

1. Female sex
2. Age below 40 years
3. Genotype 2 or 3
4. HCV viral load below 3,500,000
5. Liver biopsy demonstrating portal fibrosis or less severity

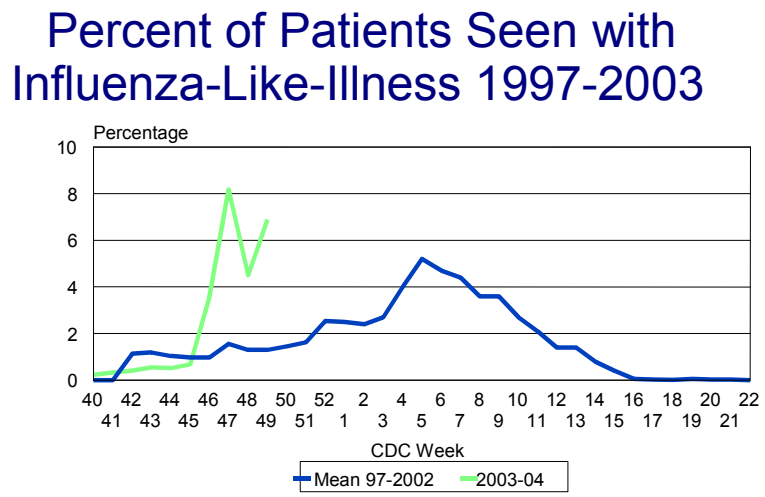
Offenders who test positive for HCV but do not qualify for drug therapy receive counseling and education on how to manage the disease and strategies for not spreading it to others. The Hepatitis C Coordinator at the Indiana State Department of Health (ISDH) is working closely with the DOC in helping to structure these counseling messages and in determining how such education is most effectively delivered to offenders.

All offenders entering the DOC are tested for HCV, but some offenders are released prior to receiving their test results. Though there is no state statute requiring the ISDH to notify individuals of their HCV status, the Hepatitis Unit of the ISDH Division of HIV/STD works with trained staff around the state to inform offenders of their test results and deliver educational messages about the virus so the disease can be managed as much as possible.

Reference:

- Health Care Services Directive Number: HCSD-3.09

Indiana Data of Influenza-Like-Illness (ILI) Sentinel Report



Data may change as additional reports are received.
Data accurate as of December 10, 2003

The age groups of those presenting themselves with ILI in Indiana are as follows:

0-4 y/o	5-24 y/o	25-64 y/o	65 and older	Total ILI	Total Pt.
122 (11%)	775 (71%)	167 (15%)	33 (2.5%)	1,097	40,472

Week #	# Sentinels	# Reporting Sentinels	Total Pt ILI	% ILI	Total Patients Seen
40	25	17	9	0.23	3,777
41	25	17	12	0.33	3,596
42	25	18	16	0.41	3,839
43	25	17	22	0.55	3,978
44	25	17	22	0.52	4,188
45	25	17	31	0.69	4,463
46	25	17	167	3.57	4,665
47	25	19	375	8.17	4,588
48	25	19	124	4.50	2,752
49	26	16	319	6.89	4,626

The ISDH lab has confirmed 22 specimens positive for Influenza A virus. Seventeen of these have been subtyped as A/Panama-like (H3N2). These subtype results do not distinguish between the A/Fujian strain currently circulating, and the A/Panama vaccine strain, so the specimens are being sent to CDC for further testing. The positive specimens are from Delaware, Pulaski, Allen, Tippecanoe and St. Joseph counties. The ISDH lab has received many specimens and continues to do testing. Sentinel physicians are encouraged to submit specimens for influenza surveillance.

The drift variant A/ Fujian is related to the vaccine strain, A/Panama/2007/99-like virus that is in this year's influenza vaccine. It is likely that the current U.S. vaccine will offer some, but lower level cross-protection immunity against the A/Fujian/411/2002-like virus.

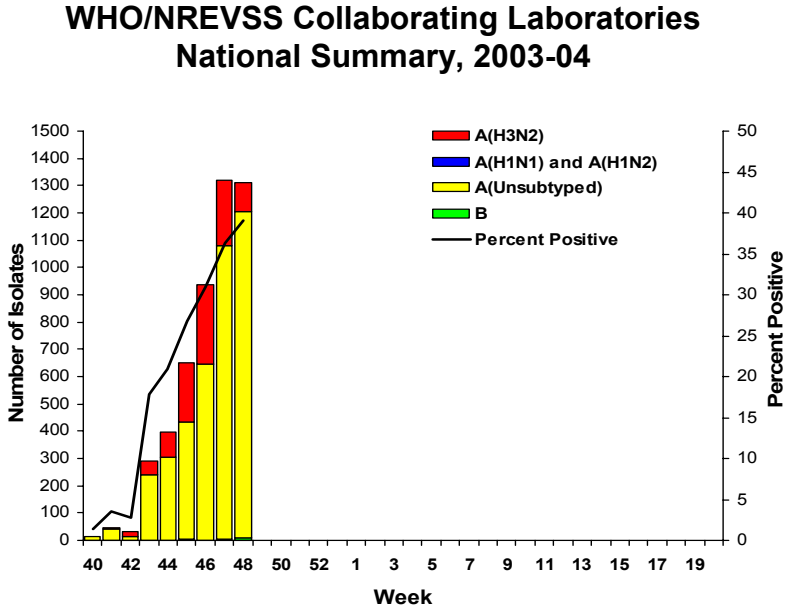
National WEEKLY INFLUENZA SURVEILLANCE REPORT

Week ending November 29, 2003—Week 48

Synopsis: Influenza activity in the United States continued to increase during week 48 (November 23 - 29, 2003). One thousand three hundred nine (39.1%) of 3,350 specimens collected from throughout the United States and tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories were positive for influenza. The proportion of patient visits to sentinel providers for influenza-like illness (ILI) overall was 5.1%, which is above the national baseline of 2.5%. The proportion of deaths attributed to pneumonia and influenza was 6.5%, which is below the epidemic threshold for the week. Thirteen state health departments reported widespread influenza activity, 16 states and New York City reported regional activity, 6 states reported local influenza activity, 13 states, Guam, and Puerto Rico reported sporadic influenza activity, and 1 state and the District of Columbia reported no influenza activity.

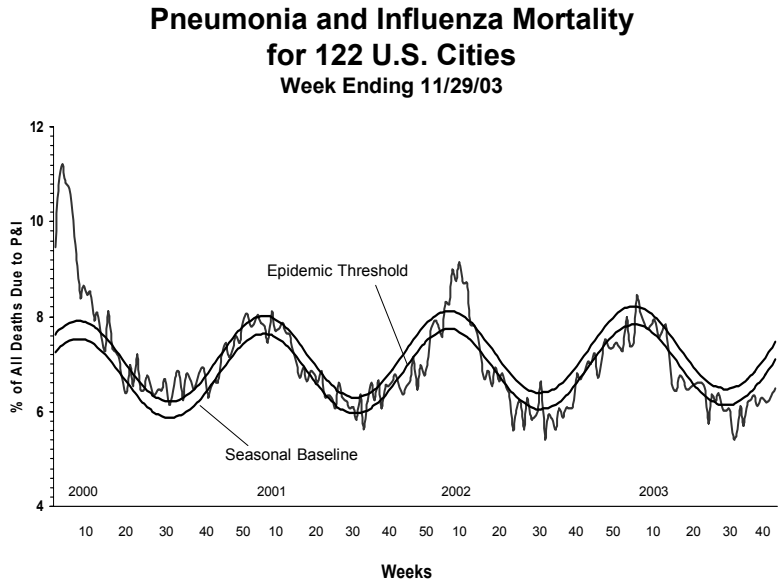
Laboratory Surveillance*: During week 48, WHO and NREVSS laboratories reported 3,350 specimens tested for influenza viruses, and 1,309 (39.1%) were positive. Of these, 105 were influenza A(H3N2) viruses, 1,197 were influenza A viruses that were not subtyped, and 7 were influenza B viruses.

Since September 28, WHO and NREVSS laboratories have tested a total of 19,469 specimens for influenza viruses and 4,992 (25.6%) were positive. Among the 4,992 influenza viruses, 4,973 (99.6%) were influenza A viruses and 19 (0.4%) were influenza B viruses. One thousand sixteen (20.4%) of the 4,973 influenza A viruses have been subtyped; 1,015 (99.9%) were influenza A (H3N2) viruses and 1 (0.1%) was an A (H1) virus. Forty-one states and all 9 surveillance regions** have reported laboratory-confirmed influenza this season. Two thousand one hundred ninety-four (44.0%) of the 4,992 isolates were reported from the West South Central region, and 1,793 (35.9%) were from the Mountain region.

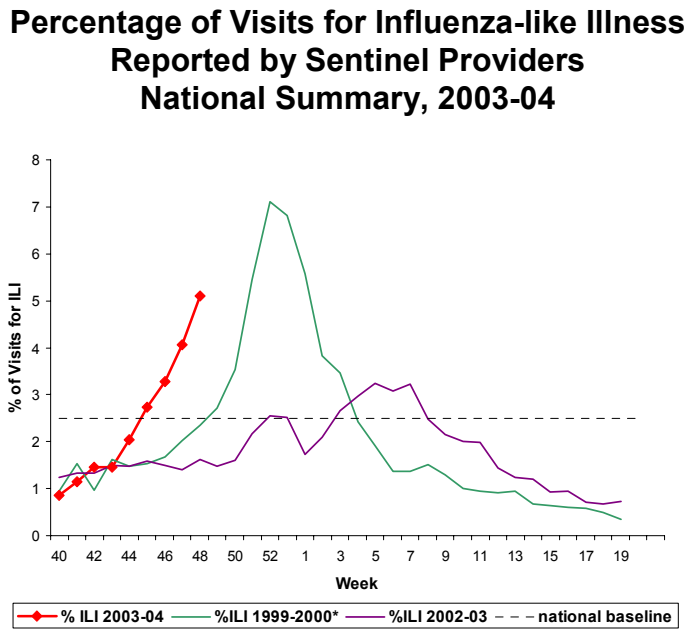


Antigenic Characterization: CDC has antigenically characterized 157 influenza A (H3N2) viruses collected by U.S. laboratories since October 1 and found that 45 (29%) were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 112 (71%) were similar to the drift variant, A/Fujian/411/2002 (H3N2). The A/Fujian strain predominated in Australia and New Zealand during the recent Southern Hemisphere influenza season and is a drift variant related to the vaccine strain, A/Panama/2007/99. Antibodies produced against the vaccine virus cross-react with A/Fujian/411/2002-like viruses, but at a lower level than against A/Panama/2007/99 (H3N2). Vaccine effectiveness depends, in part, on the match between vaccine strains and circulating viruses and cannot be determined by laboratory testing. Although vaccine effectiveness against A/Fujian/411/2002-like viruses may be less than that against A/Panama/2007/99-like viruses, it is expected that the current U.S. vaccine will offer some cross-protective immunity against the A/Fujian/411/2002-like viruses and reduce the severity of disease. One influenza A(H1N1) virus was antigenically characterized and was similar to the vaccine strain A/New Caledonia/20/99.

Pneumonia and Influenza Mortality Surveillance: During week 48, 6.5% of all deaths reported by the vital statistics offices of 122 U.S. cities were due to pneumonia and influenza. This percentage is below the epidemic threshold of 7.5% for week 48.

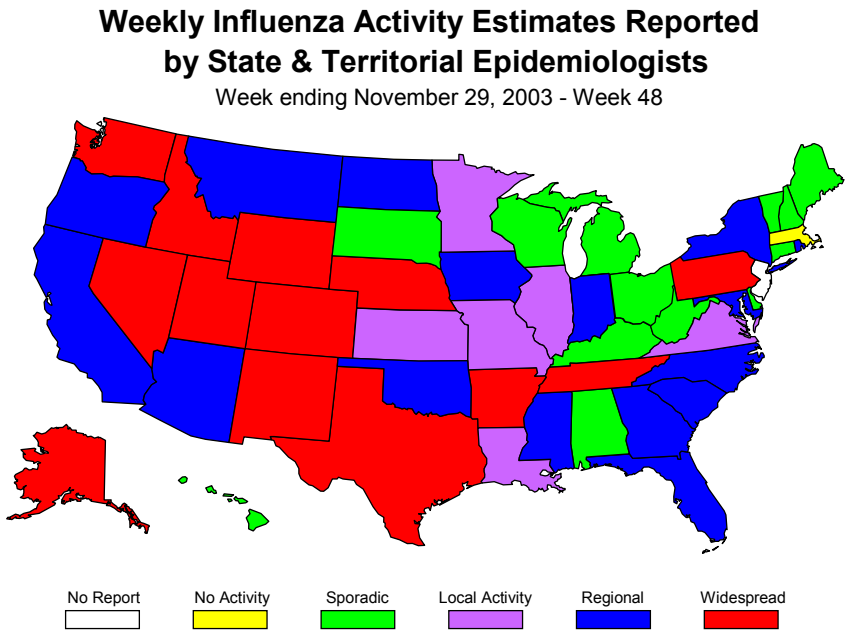


Influenza-like Illness Surveillance*: During week 48, 5.1%*** of patient visits to U.S. sentinel providers were due to ILI. This percentage is above the national baseline of 2.5%. The percentage of patient visits for ILI increased in all regions. On a regional level**, the percentage of visits for ILI was highest in the West South Central region (14.6%), followed by the Pacific (7.2%), Mountain (5.8%), and South Atlantic (4.2%) regions. All other regions were below 4%. Due to wide variability in regional level data, it is not appropriate to apply the national baseline to regional level data.



* The 1999-2000 season was selected for comparison because it was the most recent A(H3N2) season of moderate severity.

Influenza Activity as Assessed by State and Territorial Epidemiologists*: Influenza activity was reported as widespread in 13 states (Alaska, Arkansas, Colorado, Idaho, Nebraska, Nevada, New Mexico, Pennsylvania, Tennessee, Texas, Utah, Washington, and Wyoming), regional in 16 (Arizona, California, Florida, Georgia, Indiana, Iowa, Maryland, Mississippi, Montana, New York, North Carolina, North Dakota, Oklahoma, Oregon, Rhode Island, and South Carolina) and New York City, and local in 6 states (Illinois, Kansas, Louisiana, Minnesota, Missouri, and Virginia). Sporadic influenza activity was reported in 13 states (Alabama, Connecticut, Delaware, Hawaii, Kentucky, Maine, Michigan, New Hampshire, Ohio, South Dakota, Vermont, West Virginia, and Wisconsin) Guam, and Puerto Rico. Massachusetts and the District of Columbia reported no influenza activity, and 1 state did not report.



* Reporting is incomplete for this week. Numbers may change as more reports are received.

** **Surveillance Regions:** New England **(Connecticut, Maine, Massachusetts, New Hampshire, Vermont, Rhode Island);** Mid-Atlantic **(New Jersey, New York City, Pennsylvania, Upstate New York);** East North Central **(Illinois, Indiana, Michigan, Ohio, Wisconsin);** West North Central **(Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota);** South Atlantic **(Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, Washington, D.C., West Virginia);** East South Central **(Alabama, Kentucky, Mississippi, Tennessee);** West South Central **(Arkansas, Louisiana, Oklahoma, Texas);** Mountain **(Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming);** Pacific **(Alaska, California, Hawaii, Oregon, Washington).**

*** The national and regional percentage of patient visits for ILI is weighted on the basis of state population.

Report prepared: December 5, 2003

National Data taken from the CDC website

SARS Specimen Testing

The Indiana State Department of Health (ISDH) is NOT accepting Severe Acute Respiratory Syndrome (SARS) clinical specimens without prior authorization from the Epidemiology Resource Center Director of Surveillance and Investigation. SARS specimens will not be tested without prior arrangements and approval. Please contact the Director of Surveillance and Investigation, Hans Messersmith, by calling (317) 233-7861, or the ISDH Respiratory Epidemiologist, Shawn Richards, at (317) 233-7740 during normal business hours to determine if specimens should be sent to the ISDH Laboratory for SARS testing. If assistance is necessary after normal business hours, please call (317) 233-1325 and ask the duty officer to contact Hans or Shawn.

SARS is a respiratory illness caused by a novel coronavirus called SARS-associated coronavirus (SARS-CoV). The disease was first recognized in Asia in February 2003, and over the next several months spread to more than two dozen countries in North and South America, Europe, and Asia. In July, cases were no longer being reported, and SARS outbreaks worldwide were considered contained.

If there are no SARS cases worldwide, all providers should screen all persons needing hospitalization with chest X-ray-confirmed pneumonia/ARDS for any of the following:

- Health Care Worker (HCW) [1] occupation
- Travel in the 10 days prior to illness onset (or close contact with ill persons with a history of travel) to a country where SARS activity is most likely to re-emerge[2]
- Close contacts of persons (or coworker if HCW) recently found to have evidence of pneumonia on chest X-ray without an alternative diagnosis.

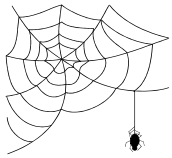
If alternative diagnosis is not made within 3 days, testing might be available at the ISDH Laboratory provided that the screening criteria are met and in consultation with the ISDH. This will be determined on a case-by-case basis. **SARS testing should not be used as a rule-out for alternative diagnosis.**

Further guidance will be supplied if there is a change in the SARS transmission level or if enhanced surveillance is necessary.

References:

[1] HCW: health care worker is defined as, any person who has close contact with patients, patient care areas (e.g. patient room) or patient care items (e.g., linens).

[2] Following this initial screening, only persons who traveled to countries with previous extensive community transmission (i.e., China, Hong Kong, or Taiwan) and who were exposed to a person with pneumonia overseas or who had been in a healthcare facility while traveling need to be evaluated for possible SARS infection



Wonderful Wide Web Sites

ISDH Data Reports Available

The ISDH Epidemiology Resource Center has the following data reports and the Indiana Epidemiology Newsletter available on the ISDH Web Page:

http://www.in.gov/isdh/dataandstats/epidem/epinews_index.htm

Indiana Cancer Incidence Report (1990, 95,96, 97)

Indiana Cancer Mortality Report (1990-94, 1992-96)

Indiana Health Behavior Risk Factors (1995-96, 97, 98, 99, 2000, 2001)

Indiana Health Behavior Risk Factors (BRFSS) Newsletter

Indiana Hospital Consumer Guide (1996)

Public, Hospital Discharge Data (1999, 2000, 2001)

Indiana Maternal & Child Health Outcomes & Performance Measures (1988-97, 1989-98, 1990-99, 1991-2000)

Indiana Marriage Report (1995, 97, 98, 99, 2000)

Indiana Mortality Report (1999, 2000, 2001)

Indiana Natality Report (1998, 99, 2000, 2001)

Indiana Induced Termination of Pregnancy Report (1998, 99, 2000)

Indiana Infectious Diseases Report (2000)

Former Indiana Report of Diseases of Public Health Interest (1996, 97, 98, 99)

HIV Disease Summary

Information as of November 30, 2003 (based on 2000 population of 6,080,485)

HIV - without AIDS to date:

328	New HIV cases from December 2002 through November 2003	12-month incidence	5.39 cases/100,000
3743	Total HIV-positive, alive and without AIDS on November 30, 2003	Point prevalence	61.56 cases/100,000

AIDS cases to date:

477	New AIDS cases from December 2002 through November 2003	12-month incidence	7.85 cases/100,000
3576	Total AIDS cases, alive on November 30, 2003	Point prevalence	58.82 cases/100,000
7381	Total AIDS cases, cumulative (alive and dead)		

REPORTED CASES of selected notifiable diseases

Disease	Cases Reported in November *MMWR* Week 45-48		Cumulative Cases Reported January - November *MMWR* Weeks 1-48	
	2002	2003	2002	2003
Campylobacteriosis	28	20	453	463
Chlamydia	1,472	1,101	16,128	15,719
E. coli O157:H7	15	9	75	88
Hepatitis A	5	5	45	65
Hepatitis B	8	1	51	33
Invasive Drug Resistant *S. pneumoniae* (DRSP)	9	12	151	141
Gonorrhea	620	463	6,957	6,177
Legionellosis	4	1	20	25
Lyme Disease	0	1	20	22
Measles	0	0	2	0
Meningococcal, invasive	3	1	32	41
Pertussis	15	11	129	67
Rocky Mountain Spotted Fever	0	0	4	1
Salmonellosis	34	38	519	554
Shigellosis	7	27	104	173
Syphilis (Primary and Secondary)	3	6	57	47
Tuberculosis	8	12	114	125
Animal Rabies	0	1 (bat)	31 (30 bats, 1 skunk)	28 (27 bats, 1 raccoon)

For information on reporting of communicable diseases in Indiana, call the *ISDH Epidemiology Resource Center* at (317) 233-7665.

Indiana
Epidemiology
Newsletter

The *Indiana Epidemiology Newsletter* is published by the Indiana State Department of Health to provide epidemiologic information to Indiana health professionals and to the public health community.